

# **METHODS AND APPARATUS FOR OPTIMIZING GARBAGE COLLECTION**

## **ABSTRACT OF THE DISCLOSURE**

- 5           Methods and apparatus for executing a method to enable memory  
associated with objects not referenced external to the executed method to be  
reclaimed upon completion of execution of the method. Methods include  
obtaining a data structure including one or more addresses of source code that  
creates local objects, obtaining next source code in the method, and  
10   determining whether an address of the obtained next source code is in the data  
structure. When the address of the obtained next source code is in the data  
structure including one or more addresses of source code that creates local  
objects, a local object is created on a local heap of memory using the source  
code associated with the address such that local objects are stored in memory  
15   separately from non-local objects.